



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,410	12/02/2004	Tobias Linke	2001P23305WOUS	1412
28204 7590 04/04/2008 SIEMENS SCHWEIZ AG I-47, INTELLECTUAL PROPERTY ALBISRIEDERSTRASSE 245 ZURICH, CH-8047 SWITZERLAND				
EXAMINER				
KRAUSE, JUSTIN MITCHELL				
ART UNIT		PAPER NUMBER		
3682				
MAIL DATE		DELIVERY MODE		
04/04/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/516,410

**Applicant(s)**

LINKE ET AL.

**Examiner**

JUSTIN KRAUSE

**Art Unit**

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date 12/2/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the second embossment member of the supporting structure (claim 12) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 12 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is not understood how or where the second embossment member is located, or how it arranged on the supporting housing. There is no shown embodiment of figure 6 incorporated into the entire device (for example as shown in figure 1) which would show how the second blocking tooth and embossment member are arranged so as to avoid contact with the other members of the device (for example GS1 and GS2) and be arranged symmetric about a center axis from the first blocking tooth.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 4-10 and 15-19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites the limitation "said first slit" and "the first blocking tooth" for which there is no antecedent basis.

Claim 6 recites the limitation "slits S1 and S2". It is unclear what slits S1 and S2 are; it appears as if the claim is intended to recite the first and second slits.

Regarding claim 7 and 9, it is unclear what the meaning of the phrase "arc of equal magnitude". Clarification is required.

Claim 8 recites the limitation "the remaining part RP" for which there is no antecedent basis.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-11 and 14-19 are rejected under 35 U.S.C. 102(b) as being anticipated by McDonnell et al. (US 6,070,852).

McDonnell discloses an angular motion driving mechanism comprising:

-A gear wheel (112) mounted on a supporting structure (30) for intermittent rotational movement

-A drive motor (40) carried by the supporting structure having an active and non-active mode.

-A driving gear (108) drivingly coupled to the motor and the gearwheel

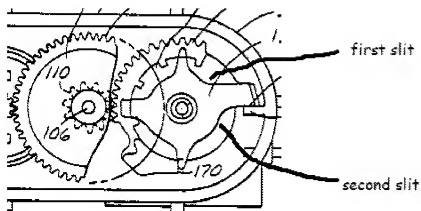
-A coiled torsion return spring (132) one end being connected to the gearwheel and the other end to the supporting structure (see fig 11) which urges the gear wheel to return from a second position to a first position

-At least a first flexible end stop being constituted by a first member (172) structurally fixated to the gear wheel to block rotational movement by engaging a first embossment (143) on the housing.

Regarding claim 2, the gear wheel is constituted of flexible material, as broadly recited any material is flexible, and the first member is integral with the gearwheel, since the stop rotates with the gear wheel it is considered to be integral to it. If applicant's intent is to form the first member and gearwheel as a single piece, the examiner suggests the term --monolithic--.

Regarding claim 3, the first member is constituted by a first blocking tooth (172) integrally formed in the gearwheel by an incision of a first slit.

Regarding claims 4 and 14, the first member is integrally formed with the gearwheel by first and second slits (see figure below).



Regarding claim 5, the width of the first and second slits increases radially towards the rotation axis of the gear.

Regarding claim 6, the slits end in a cavity having a radius substantially larger than the width of the slits.

Regarding claim 7, 15 and 16, a gear tooth segment (112) covers an arc of substantially 180 degrees separated from the blocking tooth by the first slit and defining an arc of equal magnitude between the first and second angular positions.

Regarding claim 8, the gearwheel comprises a circumferential radius within the arc which is substantially equal to the radial length of the first blocking tooth and larger than the radius of the remaining part of the gearwheel.

Regarding claim 9 and 17-18, a gear tooth segment (112) covers an arc of substantially 180 degrees separated from the blocking tooth by the first slit and defining an arc of equal magnitude between the first and second angular positions and the radial length of the first blocking tooth is larger than the radius of the gear wheel.

Regarding claim 10 and 19, the radial length of the first blocking tooth differs from the radius of the remaining part of the gearwheel by at least part of the radial length of the first embossment (see fig 11).

Regarding claim 11, an axially cylindrical rim (160) is integrally structured with the gear wheel and extending at a rear side thereof, being provided with an opening (164) towards the first blocking tooth.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over McDonnell.

McDonnell does not disclose specific dimensions.

As there is no disclosure establishing the criticality of the dimensional relationships, one of ordinary skill in the art, through the use of routine experimentation, could find the optimum parameter values suitable to the intended use of the device with a reasonable probability of success. It would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the



dimensions of the device, suitable to the intended use, through the use of known methods of routine experimentation.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUSTIN KRAUSE whose telephone number is (571)272-3012. The examiner can normally be reached on Monday - Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. K./  
Examiner, Art Unit 3682

Application/Control Number: 10/516,410

Page 9

Art Unit: 3682

/Richard WL Ridley/

Supervisory Patent Examiner, Art Unit 3682